

**Risk Reward Study Group
Meeting #12 – Facilitator’s Notes
May 19, 2005
1-5 PM**

Notice

These facilitator’s meeting notes have been prepared for the personal use of the participants in the Risk Reward Study Group (Rn’R Group). These notes do not necessarily represent the position of any individual participant or the position of the group as a whole. Because different views and positions may be developed in subsequent discussions, these notes are provided solely for informational purposes and to communicate the general nature of the discussion.

Attendance

| Member | On Site | By Phone | Absent |
|---|---------|----------|--------|
| Ray Bliven (DSIs) | X | | |
| Stefan Brown (OPUC) | X | | |
| Dick Byers (WUTC) | | | X |
| Kurt Conger (Grid West Coordinating Team) | X | | |
| Pete Craven (PacifiCorp) | | | X |
| Tom DeBoer (PSE) | | | X |
| Chris Elliott (Grid West Coordinating Team) | | | X |
| Tom Foley (Renewable Resources Community) | X | | |
| Jim Hicks (PacifiCorp) | | | X |
| Dave Hoff (PSE) | | | X |
| Bob Kahn (NIPPC) | | X | |
| Bud Krogh (Grid West Coordinating Team) | | | X |
| Larry Nordell (MT) | | | X |
| Mike McMahon (Snohomish PUD) | | | X |
| Terry Morlan (NWPCC) | | | X |
| Kevin O’Meara (PPC) | | | X |
| Carol Opatrny (BCTC) - <i>Co-Lead</i> | X | | |
| Lon Peters (PGP) | | | X |
| Ken Petersen (Idaho Power Company) | | | X |
| Janelle Schmidt (BPA) - <i>Co-Lead</i> | | X | |
| Marilynn Semro (SCL) | | | X |
| Vito Stagliano (Calpine) | | | X |
| Lou Ann Westerfield (IPUC) | | | X |

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|-----------------------|---|--|--|
| Linc Wolverton (ICNU) | X | | |
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Guests/Replacements:

Kurt Granat (PacifiCorp)
Jim Jennings (SnoPUD)

Handouts:

- “Draft Unquantified Risks”
- “Survey Material – Whitepaper Support” CCOpatrny_051905_Draft
- Issue Paper #12 “Technological Innovations That Could be Spurred by Grid West”
- Issue Paper #4 “New Transmission Construction for Generation Resources – Long Term Queues” April 11, 2005 version
- Issue Paper #8 Market Monitoring, 050205 version
- Issue Paper #3 “Unused Transmission Capacity Not Made Available” March 16, 2005

Topics of Discussion

Survey Summary

Carol distributed copies of the survey response summary that she prepared which maps the survey responses to specific issues being analyzed by the group. The response summaries are intended to characterize the responses in each category, noting the respondent characteristics where they appear to correlate. Concern was expressed that the summaries should not imply that a remedy of the problem would result in a particular societal benefit. It was suggested that the word “conclusions” may infer that the group reached a consensus conclusion which may not be the case. As a result, the summary will be redrafted to reflect “perceptions” expressed by the respondents.

The whitepapers can be used as an opportunity to test the perceptions expressed by survey respondents in the report prior to Decision Point 2. While external reference documents, such as recent IRPs, may inform the whitepaper analysis, they should not be incorporated into the survey summary unless they were included in the survey response. To the extent survey responses or comments are available that indicate opposing points of view, these should also be noted in the whitepaper text. To the extent that analysis cannot be completed to timely test the perceived problems, whitepaper authors should endeavor to frame a method for testing perceptions captured in the survey that explains how the analysis could be done, what data would be needed and, the likely terms for acquiring the data.

Western Power Market Study

The group discussed how the degree of correlation between prices in various Western markets may provide some perspective on an approach to analyzing how well existing transmission services and markets clear economic transactions. The approach suggested will look at whether the price spread for power flowing from the low cost zone to high cost zone is greater than the wheeling charge (including losses) during periods when the interties separating the regions are not loaded to their limits. Some preliminary data was compiled by Terry Morlan that indicates a high probability that price spreads may exceed contract path transmission charges. There was some discussion regarding the validity of the price indices available. For the analysis, the specifics of the data source should be provided, and if there are relevant critiques of price index reporting (e.g. FERC report, etc.), these may be offered to indicate the limitations on the data provided. Kurt Conger suggested that FERC Electric Quarterly Report (EQR) data may be used to spot check index data if there are validity concerns. He gave a preview of 2004 EQR data that he downloaded from the FERC website.

TSLG Cost Estimate

The Structure Group is in the process of preparing a bottom-up analytical model of transmission organization costs including administration, operations, facilities, and staff. The model will be provided in a spreadsheet that can be modified to allow sensitivity analysis. The cost presentation will be concurrent with the risk/reward presentation by this group. We need to begin considering how this information will be integrated into the seminar presentation.

The group discussed whether there consideration of the headcount impacts on the transmission owners when functions are transferred to Grid West. At this time, transmission owners expect to continue to maintain staff levels after Grid West begins operations. Each transmission owning organization may reevaluate headcount requirements after operational startup.

Whitepaper Reviews

Issue whitepapers were presented to the group by the authors who were provided critique by the group.

Technological Innovations. Issue Whitepaper #12. Presented by Tom Foley.

The thesis of this paper is that if Grid West takes an integrated power system perspective and is not transmission-centric, there may be significant technological developments enabled by the service structure and market design elements. It was suggested that the paper place greater stress on elements of the Grid West technical design that enable these technologies.

One example offered is the frequency responsive load shedding chip that is being developed for installation in high demand appliances. It was hypothesized that GW could facilitate deployment of such a technology in the follow ways:

- System planning may be affected to the extent that the load shedding characteristics are considered.
- Because frequency is a characteristic of the entire interconnection, regional visibility of such a load shedding resource could be factored into contingency reserve sharing.
- A frequency responsive device may be capable of participating in regulating reserve markets.

It was noted that load side technologies can only be effective if the LSE is able to implement operational functions that provide tangible grid benefits that can be passed on to customers implementing these technologies. Nevertheless, independent determination of price would provide assurance to customers that the compensation is fairly priced.

The example of Monday morning load pickup in Seattle commercial building was presented as an example of a situation where it would be desirable to shift heating load from Monday morning to an off-peak period on Sunday. Current retail prices provide no incentives for customers to shift load—a practice that could save the utility substantial amounts.

It was also noted that the paper should consider new transmission system innovations such as conductors, control devices and operational support systems. To implement these technologies, Grid West could get around many of the multi-party complexities that occur today. Furthermore, because the Grid West planning and decision-making process allocates IWRs to those who participate in funding projects that increase capacity, there is a more direct assignment of benefits to those who fund the improvements.

The example of using system planning and operational tools that compute path utilization and generation shift factors to resolve congestion was cited as application of technologies that can maximize utilization of existing transmission facilities. The survey responses were suggested as a source of additional technological references that have potential for benefits.

The paper needs to respond to the question of how Grid West could move the industry away from the status quo. If there are other alternatives, that is not within the scope of the RnR group to investigate.

New Transmission Construction for Generation Resources—Long Term Queues. Issue Whitepaper #4

April 11 version was distributed but this paper is not the one queued for discussion.

Unused Transmission Capacity. Issue Whitepaper #3. Presented by Linc Wolverton.

This paper focuses on the mismatch between contract-path scheduling limits and actual path loadings—a situation that leads to unused transmission capacity. The flow-based usage design of Grid West could minimize this mismatch and permit greater utilization of existing transmission facilities.

A number of editorial suggestions were offered. The group agreed that the paper needed to use less negative terms (too many instances of double and triple negative statements). A neutral tone will be used in the next draft. In the first paragraph, rather than stating that “Grid West will solve...” the alternative wording suggested was: “Grid West will address the mismatch...”

It was pointed out that parallel flows are a physical phenomenon that are not necessarily a problem (although they may cause problems in certain circumstances). The purpose of flow-based grid management is to take parallel flows into account.

On counterflows, Grid West would look at net flows within the area it operates (CCA) and not net area-to-area schedules. Additional work on the paper should consider current scheduling rules inherent in contract path model that limit use of physical capacity. For example, consolidation of control areas using security constrained dispatch permits greater internal netting of parallel flows.

The A to C to B example at the bottom of page 1 needs to be reviewed for accuracy and clarity.

The baseline for this analysis should consider a scenario that is likely to occur in the absence of Grid West, but should not be based on the TIG proposal—it is an alternative approach. A more appropriate baseline to consider is the BPA flow-based ATC methodology and business practices under development.

Market Monitoring. Issue paper #8.

There was not sufficient time to review this paper. Therefore, group members were asked to send comments to Carol.

RRG Presentation

- It was suggested that any CCA preliminary products would be most beneficial (e.g. preliminary PowerWorld or Grid View results).
- Including a discussion of the survey summary points in context of white paper topics would also be appropriate.

Next Meeting

- June 2 at Grid West
- It was suggested that the meeting start at 9 a.m. to permit sufficient time to catch up on issue paper review.